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ABSTRACT

This publication is a compilation of five papers that were originally presented at the 1975 National Conference of the College and University Safety Educators Association. Most of the booklet consists of the text of these papers; also included are a copy of the conference agenda and a complete roster of conference participants. The five papers presented at the conference include the following: "OSHA's Relationship to Higher Education," by Raymond C. Hall; "Safety Education: What Is It? Where Do We Go From Here?" by Kenneth F. Licht; "Safety Education: What Is It? Where Do We Go From Here?" by Dale O. Ritzel; "Role of the Safety Generalist: An Educational Solution," by Ted Ferry; and "A Safety Program in the Urban School Setting, 1975," by Larry Bates. (JG)

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

SAFETY MONOGRAPHS FOR SCHOOLS AND COLLEGES

MONOGRAPH NO. 36

FIRST NATIONAL CONFERENCE FOR COLLEGE AND UNIVERSITY SAFETY EDUCATORS ASSOCIATION

A joint project of
Central Missouri State University,
Warrensburg, Missouri and the
College and University Safety
Educators Association of the
National Safety Council
425 North Michigan, Chicago, Illinois
60611

EA 008 010

FIRST NATIONAL CONFERENCE FOR COLLEGE AND UNIVERSITY SAFETY EDUCATORS ASSOCIATION

CENTRAL MISSOURI STATE UNIVERSITY WARRENSBURG, MISSOURI AUGUST 16-17, 1975

Editor
Jack N. Green
Staff Representative
College and University Section
National Safety Council

Warren C. Lovinger

CMSU
OFFICE OF THE PRESIDENT
PHONE 816 429-4112

CENTRAL MISSOURI STATE UNIVERSITY WARRENSBURG, MISSOURI 64093

March 5, 1975

Mr. James R. Berry
Director
Transportation of Safety Research Center
University of Iowa
Oakdale, Iowa 52319

Dear Mr. Berry:

Central Missouri State University is looking forward to hosting the First Annual Conference of the College and University Safety Educators Association, August 16-17, 1975. On behalf of the University, I wish to extend a most sincere welcome to all members of your Association.

I am sure you will find Missouri an inviting area for a summer conference with a wealth of historical sites and recreational activities with excellent camping and lodging accommodations. The University facilities in Warrensburg are particularly adaptable to your meeting arrangements. (In addition, a number of very interesting activities for family members have been arranged in the Warrensburg and Kansas City areas). Numerous persons on our campus are very interested in your meeting, and they, in cooperation with our various service units, will stand ready to assist you in every way possible in making your conference a meaningful and successful experience.

We wish your Association the very best in its endeavors and issue this special invitation to your members to join in supporting this, their first conference, by their attendance. We are confident all of you will enjoy your stay with us and consider it a pleasure to be your host.

Very sincerely yours,

Warren C. Lovinger

Warren C. Lovinger
President

WCL:ced

EQUAL EDUCATION AND EMPLOYMENT OPPORTUNITY M. F.

COLLEGE AND UNIVERSITY SAFETY EDUCATORS ASSOCIATION

The College and University Safety Educators Association was organized in 1974. Three divisions of the Section - Teacher Education and Research, College and University Safety Centers and Science and Engineering - were combined to form the Association. The officers of the Association are chairman, vice-chairman, secretary, treasurer and three members of an Executive Committee. Projects of the following Committees comprise most of the activities of the Association: Nominating, Conference Site, Terms of Reference, Congress Program, Conference Host, Membership, Safety Centers, Teacher Preparation, Curriculum, Research, Industrial and Environment, and others.

College and University personnel who comprise the membership of the CUSEA are some of the following: Athletics, Physical Education, Recreation, Audio Visuals Aids, Driver and Traffic Safety Education, Safety Education, Elementary and School Safety Education - Teacher Preparation, First Aid: Instruction, Emergency, Firearms, Shop Safety Education, Research, Teacher Preparation in Safety Education, and others concerned with activities other than employee safety.

CUSEA sponsors a National Conference for College and University Safety Educators. The first conference was held in 1975 at Central Missouri State University, Warrensburg. Council monographs on the conference proceedings are published by the Association.

The first division of the Section when it was organized in 1957 was Research and Safety Education. The College Safety Education Division was added late in 1957 and the College and University Safety Center Division was established in 1960.

This Association also has a separate Terms of Reference under which to operate.

PROGRAM PLANNING COMMITTEE
FIRST NATIONAL CONFERENCE
FOR
COLLEGE AND UNIVERSITY SAFETY EDUCATORS ASSOCIATION

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James Berry
Jack Green, Sr.
N. W. Patterson

HOST COMMITTEE

Richard Tossell, Chairman
Robert Baldwin
Robert L. Marshall
Robert Ulrich

COLLEGE AND UNIVERSITY SAFETY
EDUCATORS ASSOCIATION
1974-75

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Vice Chairman.....
Secretary.....Larry Knauff
Executive Committee:
Harold Grieve.....1975
Alton Thygerson.....1976
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Conference Site.....Marlene Bieber
Terms of Reference.....Richard Tossell
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Research.....Harvey Clearwater
Industrial & Environment.....Marvin Johnson
Jack Green, Sr. Staff Representative

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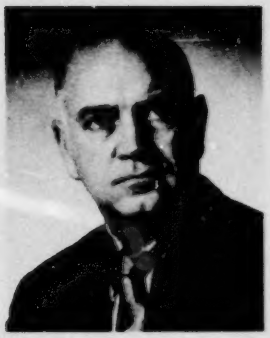
1975-76

Marvin Mills
Chairman
Coll. & Univ.
Safety Ed. Assn.



Robert Marshall
Dean, CMSU
School of
Public Services

The memorial is a tribute to the dog "man's absolutely unselfish friend".. It is located on the Courthouse lawn in Warrensburg, Missouri. A trial was held here over the killing of the dog and the phrase was originated by the lawyer.

CONFERENCE OFFICIALS

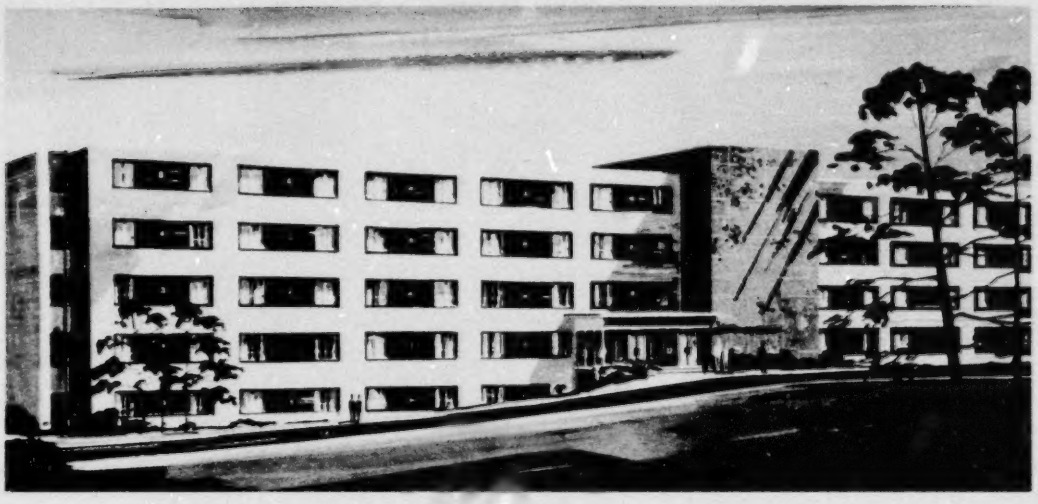
Richard Tossell
Chairman
Host Committee

Robert Semonisck
Chairman
Program Committee

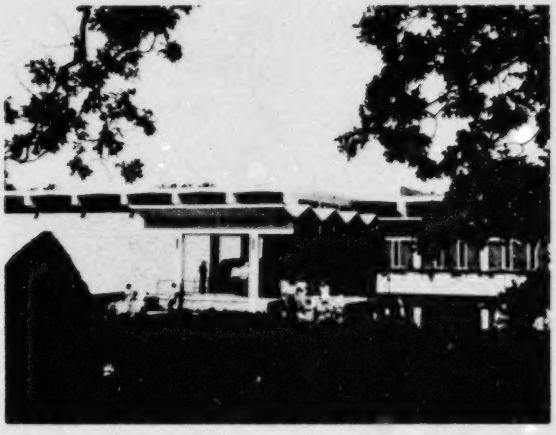
Normal Patterson
Housing

Program Planning: (Left to Right)
Richard Tossell, James Berry, Robert
Semonisck and Jack Green, Sr.

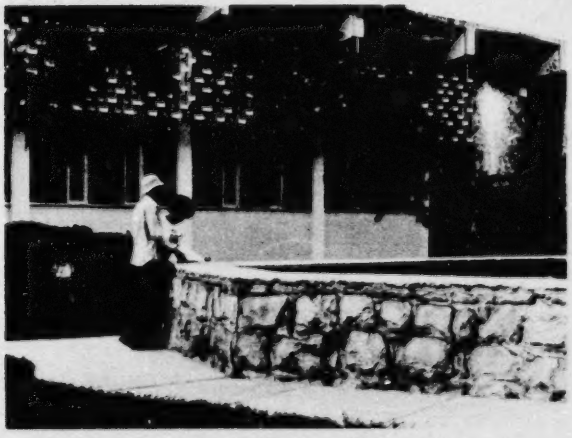
CAMPUS BUILDINGS
CENTRAL MISSOURI STATE UNIVERSITY



Conference Center Where Conferees Were Housed

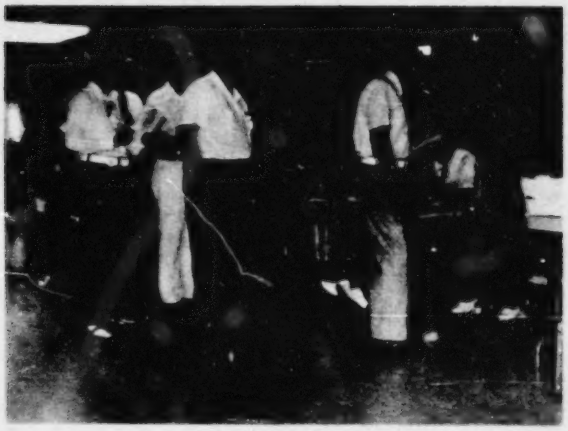


CMSU Student Union
Site of Conference Meetings



The Student Union Fountain

CONFERENCE CANDIDS



Registration

Coffee Break

Left to Right: Richard Tossell, Amos Neyhart and Marvin Mills

Conference Participants

Left to Right -- Front Row: Charles Frazier, Dale James, Ted Ferry, Robert Marshall, Geoff Crowe, James Stockman, Larry Bates, Richard Tossell, Marvin Mills, Howard Johnson, Jack Green Sr., Normal Patterson. Row 2: A. F. Thompson, Fred Wagner, Amos Neyhart, Kenneth Ricard, Ben Murvin. Row 3: Ray Ochs, Charles McDaniel, James Crowe, George Burgess, Al Neal. Row 4: Al King, Ron Holes, Duane Patton, Don Henry, Alan Rabe, James Glaze. Row 5: Dale Ritzel, John Gordon, Wally Timmons, Sam Messer. Row 6: Bob Semonisck, Delbert Karnes, Bill King, Will Valett, Roy Moss, Walter Eaton, Jack LaBonde, Eldon Engle, Alan Probst

ROSTER

FIRST NATIONAL CONFERENCE FOR THE
COLLEGE AND UNIVERSITY SAFETY EDUCATORS ASSOCIATION

Isaac Barnett	North Carolina A & T State University, Greensboro
Larry Bates	Kansas City School System, Kansas City, Missouri
George M. Burgess	Northern Virginia Community College, Annadale
Geoff Crowe	Barnaby, British Columbia, Canada
James W. Crowe	Indiana University, Bloomington
Armon Deurmier	California State University, Fresno
Walter Eaton	University of Georgia, Athens
E. Eldon Engel	Eastern Washington State College, Cheney
Ted Ferry	University of Southern California, Los Angeles
Charles Frazier	Albana State College, Albana, Georgia
Cotton Gann	Santa Fe City Schools, New Mexico
James R. Glaze	University of Illinois, Urbana-Champaign
John R. Gordon	New York University, New York, New York
Jack N. Green Sr.	National Safety Council, Chicago, Illinois
Ron Hales	Central Washington State College, Ellensburg
Raymond C. Hall	University of Colorado, Boulder
Don Henry	University of Kansas, Lawrence
John Hirschmann Jr.	Memphis State University, Tennessee
Dale F. Janes	Oklahoma State University, Stillwater
Howard M. Johnson	Weber State College, Ogden, Utah
Delbert Karnes	Oklahoma State University, Stillwater
Alfred S. King	East Carolina University, Greenville
William H. King	University of Arizona, Tuscon
Jack LaBonde	University of Northern Colorado, Greeley
George L. Logan	Kentucky Department of Education, Lexington
Robert Marshall	Central Missouri State University, Warrensburg
Frank Masten	Ginn and Company
Joe Milan	Aims College, Greeley, Colorado
Marvin Mills	Marshall University, Huntington, West Virginia
Samuel P. Messer	University of Miami, Coral Gables, Florida
Roy G. Moss, Jr.	Sam Houston State University, Huntsville
Ben F. Murvin, Jr.	South Carolina State College, Orangeburg
Charles E. McDaniel	Appalachian State University, Boone, North Carolina
Albert Neal	University of South Carolina, Columbia
N. W. Patterson	Central Missouri State University, Warrensburg
Tom Phelps	Colton High School, Colton, California
C. Duane Patton	Central Washington State College, Ellenburg
Alan R. Probst	California State University, Long Beach
Alan Rabe	Central Michigan University, Mt. Pleasant
Kenneth Ricard	Colorado State University, Ft. Collins
Dale O. Ritzel	Southern Illinois University, Carbondale
Robert Semonisck	Central Missouri State University, Warrensburg
Marvin Speight	A.S.U. Beebe Branch, Ward, Arkansas
James W. Standifer	Texas Christian University, Ft. Worth, Texas
James Stockman	International Safety Institute Inc., California, Pa.
A. F. Thompson	University of Tennessee, Knoxville
E. W. Timmons	AAA, ODU, Norfolk State College, Virginia Beach, Va.
Richard Tossell	Central Missouri State University, Warrensburg
Robert Ulrich	Central Missouri State University, Warrensburg
Will Valett	University of Wisconsin-Stout, Menomonie
Fred Wagner	University of Dubuque, Dubuque, Iowa

PROGRAM

NATIONAL CONFERENCE OF THE COLLEGE AND UNIVERSITY
SAFETY EDUCATORS ASSOCIATION

Conference Program

Registration: Saturday, August 16, 10:30 a.m.-2:30 p.m.
University Union, Room 206

OPENING SESSION
1:15-5:00 p.m. Saturday, August 16

Presiding: Marvin D. Mills
Marshall University
Chairman, College and
University Safety Educators
Association

Welcome: Robert L. Marshall, Dean
School of Public Services
Central Missouri State University

Program Overview: Robert Semonisck
Central Missouri State University
Program Chairman, CUSEA

Introduction of Speakers: Marvin D. Mills

TOPIC I: OSHA's Relationship to Higher Education

Speaker: Ray Hall
Safety Engineer
University of Colorado

Discussion

TOPIC II: What Safety Educators Should Be Doing
About OSHA

Speaker: Armon Deurmier, Asst. Professor of
Health Science
California State University

Discussion

Adjournment

Registration: Sunday, August 17, 12:00-2:00 p.m.
University Union, Main Lobby

GENERAL SESSION
1:00-4:00 p.m. Sunday, August 17, Room 206

Presiding: Marvin D. Mills

TOPIC: Safety Education: What Is It/Where Do We Go From Here?

Speakers:
- Kenneth Licht, Manager
  School and College Department
  National Safety Council

- Dale Ritzel
  Associate Professor
  Southern Illinois University

- Ted Ferry, Head
  Safety Management Department
  Safety Center
  University of Southern California

- Larry Bates
  Director of Safety Education
  Kansas City School System

Discussion

Coffee Break

Discussion (Continued)

BUSINESS MEETING

Presiding: Marvin D. Mills

Adjournment: 5:00 p.m.

Conference Speakers

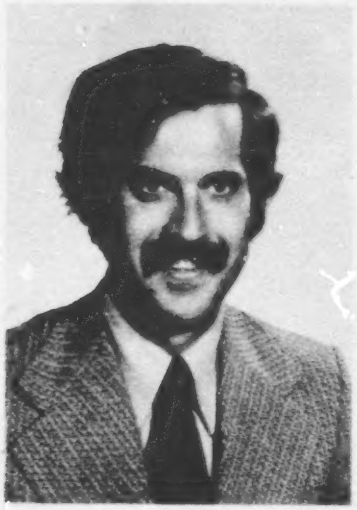
Robert L. Marshall

Robert Semonisck

Armon Deurmier

Raymond C. Hall

Conference Speakers



Dale O. Kitzel

Kenneth F. Licht

Ted Ferry

Larry Bates

TABLE OF CONTENTS

	TITLE	PAGE
1.	WELCOME TO CENTRAL MISSOURI STATE UNIVERSITY ROBERT L. MARSHALL	1
2.	OSHA'S RELATIONSHIP TO HIGHER EDUCATION RAYMOND C. HALL	3
3.	SAFETY EDUCATION -- WHAT IS IT? WHERE DO WE GO FROM HERE? KENNETH F. LICHT	10
4.	SAFETY EDUCATION: WHAT IS IT? WHERE DO WE GO FROM HERE? DALE O. RITZEL	19
5.	ROLE OF THE SAFETY GENERALIST - AN EDUCATIONAL SOLUTION TED FERRY	23
6.	A SAFETY PROGRAM IN THE URBAN SCHOOL SETTING, 1975 LARRY BATES	30
7.	OTHER SAFETY MONOGRAPHS FOR SCHOOLS AND COLLEGES	34

WELCOME TO CENTRAL MISSOURI STATE UNIVERSITY

Dr. Robert L. Marshall
Dean, School of Public Services
and
Director, Missouri Safety Center
Central Missouri State University
Warrensburg, MO

Mr. Chairman, ladies and gentlemen. It is a very real pleasure for me to have the opportunity to welcome this group to the campus of Central Missouri State University. This first Annual Conference of the College and University Safety Educators Association is a sound and proper step. We are pleased to serve as your hosts for this conference.

The need for an exchange of ideas, research, techniques, and all the other things that go on at conferences such as this, is clearly evident. During the past 10-12 years more than 70 national laws have been enacted by the Congress of the United States which have an immediate effect upon the programs all of us are involved in to one degree or another. Some of the laws are well known such as the:

1. Highway Safety Act of 1966
2. Safe Streets Act of 1968
3. Occupational Safety and Health Act of 1970
4. And about 70 other safety related laws

These laws have created unprecedented demands on colleges and universities for expanded services in the areas of: instruction at the undergraduate and graduate levels; research; special services (short courses, consulting, the making of films, etc.); and publications. In a small mid-western university, like Central Missouri State University, we have seen the need and have tried to help meet these needs in the four areas previously listed, in the areas where we had the competence to be of service. As an example, we probably have more than 1,000 job openings for our graduates in 10 or 11 areas where we have developed programs.

Central Missouri State University is 104 years old. It started as a Normal School in 1871 and has changed with the times and is known today as Central Missouri State University. CMSU has a staff of more than 500 professors and a student body of 8,760 (1974-75).

The School of Public Services was formed in 1971 and includes the Departments of: Criminal Justice Administration, Safety, and Industrial Safety and Hygiene (as of September 1, 1975); the Missouri Safety Center and the National Center for Administration of Criminal Justice. A brochure has been distributed to you which describes the school in more detail.

The Missouri Safety Center was started July 1, 1967, and has tried to work in the four basic areas of: instruction, research, services, and publications.

1. More than 42,000 people have received training of some type. (School bus drivers, judges, policemen, professors, industrial hygienists, traffic engineers, corrections personnel, etc.)

2. More than $6,000,000.00 in grants from federal agencies and private sources have been obtained.

The School of Public Services, which grew out of the Missouri Safety Center, has graduated 1,224 people at the Associate, BS, Masters, and Specialist levels at the end of the 1974-75 academic year. A listing of current programs of the School of Public Services has been distributed to you.

This background material is presented to you as part of the welcome since we want you to take a good hard look at the Missouri Safety Center and the School of Public Services. We would appreciate your suggestions as to how we might do a better job as a School and as the State Safety Center while you are on campus.

You have a busy two days ahead of you. We hope you will be able to stay for the 19th Annual Conference of the American Driver and Traffic Safety Education Association, August 16-21, 1975, here on campus also.

We have given you a third brochure entitled "Your Regional University." This brochure explains CMSU's facilities which are available to you. We invite you to relax during your free time at this conference to go swimming, play golf, go boating, go fishing or just plain relax and visit.

We welcome you to CMSU and to Warrensburg, Missouri. We are honored that your officers chose CMSU for this first annual meeting. If there is anything the staff of the School of Public Services can do to make your stay in Warrensburg more enjoyable please let any of us on the staff know.

On behalf of all CMSU staff members - Welcome to Warrensburg; the home of Old Drum, or as some of our students say, the town whose most famous citizen is a dog. (This is the community where the phrase "Dog is Man's Best Friend" developed. Become familiar with this event while you are here.)

Thank you.

OSHA'S RELATIONSHIP TO HIGHER EDUCATION

Raymond C. Hall, CSP
Safety Engineer
University of Colorado

On behalf of the Campus Safety Association, we very much appreciate this opportunity to participate in the First National Conference of the College and University Safety Educators Association and we wish it a long and fruitful life.

The Campus Safety Association would also like you to know that it wholeheartedly supports your new organization and knows that great things will come from it.

Moreover, the Association is prepared to assist you in getting your organization started since we have so much in common. Our Nation's colleges and universities have many problems in the area of environmental health and safety which can best be resolved by working together toward common goals.

We are the "operators" and you are the "educators"; together we can benefit all campus communities.

It is my sincere hope that upon conclusion of my little presentation today that both our organizations can make great steps towards better cooperation in joint problem-solving.

The Williams-Steiger Occupational Safety and Health Act of 1970 (Public Law 91-596) has created a profound impact upon the daily functioning and long-range planning of employers throughout the United States and its possessions. Colleges and universities have been no exception. Administrators at private universities have been under the gun since April 28th, 1971 and there are several very explanatory reports in National Safety Council publication, the Campus Safety Newsletter and NACUBO publications to bear me out.

The United States Government and any state or political subdivisions were excluded under the original act. The States, however, were encouraged to develop programs for establishing and enforcing occupational safety and health standards. At present about 23 states have opted to enforce their own programs and in all such plans public employees are to be protected by programs "equally effective" as the private sector. Thus state universities, under state approval plans, must begin to perform.

But what about those state universities located in states without approved plans or who have withdrawn their plans?

A most recent contact with the OSHA Regional Office in Denver indicated that the Federal Government is indeed interested in these institutions. Under the Technical Assistance Program, presently touring congressional chambers in Washington, local directors are confident that many such institutions will avail themselves of these services and comply voluntarily with published standards.

This now indicates that we are viewing three levels of compliance activities:

1. Private colleges and universities.

2. State universities and colleges covered by approved state plans, and

3. State universities and colleges in states without approved plans.

Unfortunately, or fortunately, however you may view it, there is another level to consider. It is those universities who are constitutional entities unto themselves. The University of Colorado happens to be in this classification and let me tell you now that it brings with it a whole host of problems concerning the freedom of the Regents to conduct their business within a constitutional framework established a century ago.

The University of Michigan may well be the only other institution facing this same perplexing problem.

Perhaps this session should have more aptly been entitled, "Comply and Cooperate." But institutional attitudes should not be dominated by panic and alarm. Rather, it's time for an educated look at facilities and programs and this beginning of plans which, in the long run, will bring colleges and universities into compliance with OSHA standards and record keeping requirements.

To meet the philosophy inherent in the original act, a three-pronged planning approach is recommended:

1. Establish Institutional Coordination
   Establish a formal working framework to coordinate all environmental health and safety related activities within the university. Designate your resident experts and charge them with the coordination of all aspects of the program.

2. Relate The OSHAct to the Institution
   After the formal structure has been established and the rules are known to everyone, relate OSHA regulations to specific institutional programs and facilities. Survey every inch of your institutional environment - identify non-complying facilities and operations - identify health hazards or potential health hazards - establish priorities for elimination or control. Your end product becomes a viable long-range plan, including financial implications, for the control of health and safety hazards on the campus.

3. Allocate Resources
   The financial implications are great and must be met with a correspondingly great commitment to eliminate hazards on the part of the institution, or those who are charged with the allocation of available resources. Gradual allocation of budgetary resources is necessary to finance the long-range plans developed in the second step of your planned approach.

But I'm a born optimist and I am sure that you have this same theme fired at you from every conceivable direction and that you have a viable in-house program. But like me, you don't have any problems money couldn't correct - but you don't have the money.

Since entering the safety field at campus level, I have been amazed at the miserliness exhibited by many state legislators when it comes to occupational safety and health. This will not be a program designed to provide you with clues to lobbying practices at state legislatures. But there is a fundamental law of economics and social behavior that nothing is worth more than you are willing to pay for it.

So now I ask, are we doing all - or giving all of our resources, public and private, that's needed to get the job done? I dare say that we are not doing as well as we should and before we finish today we may well find part of the answer.

Initially, many of us on the operators side of institutional safety programs were all for OSHA because we believed that federal enforcement guidelines would provide us with some additional and badly needed clout. To our dismay, too many businesses and educational institutions decided to gamble and take a chance that fines which might be imposed would be cheaper in the end than the cost of meeting the requirements.

Nor did the inspectors, state or federal, do much toward instilling any enthusiasm in employers to comply.

The standards compliance feature has done little to accomplish the intent of the original OSHAct. For the most part, compliance with standards has been met, with little else. We cannot expect to make much of a dent in annual accident statistics unless we base our safety and compliance programs upon the proven principles of safety programming.

Unfortunately the legislative approach has become an inept political system absorbing money and effort and is unable to prove that accidental injury or occupational illnesses are being significantly reduced.

In a look backward over the past decade, developments in the field of environmental health and safety have been tremendous. Congressional action, during the same time frame, has resulted in 65 major laws, of

which 20 were passed by the 92nd Congress. Of particular note, to those of us who have hung out professional hats on some of these, are the:

Highway Safety Act of 1966,
Occupational Safety and Health Act of 1970,
Consumer Product Safety Act of 1973, and the
Fire Prevention and Control Act of 1974.

These Acts have provided us with ample basis for the conduct of effective educational programs and vast areas of new research, yet many of us in the Campus Safety Association feel that too many safety educators have spent an inordinately greater share of time on "drivers ed" than other equally important, equally rewarding and measureable areas of environmental health and safety.

The number of institutions offering courses in a wide range of health and safety subjects is increasing. Many who are listed are doing a valuable service; but there aren't many that can provide a total service to an undergraduate in safety, or any other professional area for that matter.

And yet there is hardly a technical publication available today that doesn't contain an article or reference to OSHA and its impact. Usually written by someone who found out the hard way and is passing along some "hints" to his peers in his own professional group.

Our Campus Safety Officers at our nations colleges and universities haven't done too well either. Maybe we don't speak a language understood by administrators. When it comes to the allocation of university resources, the safety and health activity is usually low man on the totem pole. Safety and health has not been forgotten, but it's just not an emotional issue right now.

Low budgets, more services for the buck, equal opportunity, minority programs, affirmative action - all are emotional issues - important social issues - but the prevention of accidents and elimination of occupational illnesses is an important social issue, but not emotional - unless it happens to you.

The old saying goes, "the only thing that's static is change." And so it is in environmental health and safety where future trends are becoming discernable as tomorrow becomes today. The changes that will arise will create a need for major innovations in the manner in which we prepare ourselves for our jobs, the manner in which we meet our responsibilities and the criteria for determining effectiveness.

As industrial processes become more complex, as new materials and substances come into use, as new drugs and chemicals are created, the dangers to producers and consumers grow. By itself, an industrial process may not be particularly hazardous, but the synergistic effect of several industrial processes, practiced by a variety of manufacturers, crowded into an industrial environment could collectively create a cataclysmic environment.

Consider for a moment the increasing envolvement of the public in the following industrial miscalculations: The Flixborough explosion of June 1974; the asbestosis claims filed by public neighbors to industrial plants; the public involvements in the viryl chloride caper - these were the headline grabers in 1974 and 75. But how many more are there of which we have no knowledge? Will Halon 1211 or 1301 replace CCl_4 in lethality in 1995?

Many times as I travel about the United States and other countries, I view occupational safety and health activities and I ask myself, "Isn't it possible that we could be doing it better?" What is the University of Colorado, and for that matter, your institution doing about total environmental health and safety?

It's obvious that universities supported by tax funds cannot always do what they might reasonably be asked to do in safety and health. But state universities must be doing more to train people to work, play, travel and do whatever else they want to do safely and in full health.

Last fall Cyrus Mayshark, in his presentation to the School and College Conference said, "Ultimately, any curriculum must become a local curriculum for students in a specific setting. A national curriculum can never have the embellishments that are necessary to make a curriculum meaningful, to make a curriculum really live for students and teachers at the local level." He continued by quoting from Frank Bobbitt's book, HOW TO MAKE A CURRICULUM (1924) and described five leading propositions; the last of which had a great impact for me.

THE ACTIVITIES AND THE EXPERIENCE ARE CURRICULUM

Industrial experience? Well not exactly, but I ask how many of you are using that great environmental laboratory called a college campus in your curriculum? How many of you are cooperating with or know intimately your campus safety officer? How many of you are tapping his expertise based upon practical experience to bring "real life" situations into your classes? How many very helpful on-campus research projects are you conducting in concert with your safety officer to make the campus a better, safer, healthier place?

I don't expect an answer now, but I do expect you to consider possible answers and the results will show up at future campus safety conferences.

Eric Wigglesworth, Melbourne, Australia, published an article in the March 1973 issue of PROFESSIONAL SAFETY entitled, INJURY PREVENTION: TOWARD AN ACADEMIC DISCIPLINE. He suggested that there is now no reason why safety education should not progress to the status of an academic discipline. Every profession, he wrote, gains its status from the existence of a body of knowledge, structured into a coherent, disciplined syllabus. If the injury prevention specialty is to develop professional status, it requires a coherent discipline. If this development is to take

place, he continued, it is pertinent and relevant to identify the objectives of safety education. And he listed the four aims as:

1. to qualify men and women for injury and loss control work,

2. to instill a scientific and professional attitude,

3. to encourage contributions of new knowledge, and

4. to initiate and develop research in safety and occupational health problems.

Safety education as a new professional discipline. in its own right, has no impediments provided that changes in emphasis are allowed to occur.

On May 15th past, I was lucky enough to attend an industrial health conference in Denver at which Dr. John Finklea, Director of the National Institute for Occupational Safety and Health, was the featured speaker. In his talk he discussed the changing nature of NIOSH and related the basic health goals that he has established. These goals are:

1. Reasonably safe and adequate food supplies,

2. Sufficient potable water,

3. Acceptable disposal systems for liquid and solid wastes,

4. A safer work place,

5. Ambient air requirements, and

6. Effective air pollution controls.

He closed his talk by relating twelve problem areas that must be solved by all of us working together. I will not relate all twelve, but I have selected a few which support what I have attempted to say today.

1. We're not doing enough to develop the manpower necessary to meet occupational safety and health legislative mandates. Neither the states, federal government, industry nor labor are doing the job.

2. We are only beginning to develop the educational mechanisms to inform and motivate workers and businessmen. We're not getting the decision makers of today and the leaders of tomorrow; the key people are being left out.

3. We must better understand occupational accidents and enact remedial measures to reduce them.

So there you have it.

We have an important social problem which needs resolution.

We have federal incursions into occupational safety and health which will require everyone's compliance to become valuable.

We have a man from "down-under" who recognizes a problem in safety education and recommends a solution.

We have a new director of NIOSH who has challenged safety engineers and safety educators to do something and do it soon.

Do we need a more visible relationship between OSHA and higher education, or is the challenge clear enough to illicit effective action?

The implications are clear; the relationships are real; can we arise to the challenge? I believe we can.

Thank you.

SAFETY EDUCATION -- WHAT IS IT? WHERE DO WE GO FROM HERE?

Kenneth F. Licht
Manager, School & College Dept.
National Safety Council
Chicago, IL

There are at least two reasons why I am especially pleased to participate in this discussion on "what is safety education"? First of all, the concept of safety tends to be rather slippery, and those of us who call ourselves safety educators need to have some pretty clear pictures in our heads about what this safety business is all about. So I'm eager to present for your consideration some ideas about safety education I've put together from a variety of sources.

Secondly, it seems to me vitally important to the success of this fledgling association of college and university safety educators that you have some mutually agreed upon definition of the role, purpose and function of your organization. Such objectives are not likely to be clearly defined unless you agree on what is the content of this thing we call "safety education."

I hope that as a result of the ideas presented by myself and fellow panelists and the ensuing group discussion, CUSEA will be able to establish a clear definition of safety education. That definition I hope will be incorporated into your Terms of Reference. Such a definition is most urgently needed, in my opinion.

Let me turn, then, to an examination of the concept of safety. First, I'm going to show you a transparency which indicates that there are at least five distinct meanings which can be ascribed to safety (or its derivitive). This transparency will give examples of these five meanings. Next I'll show a transparency which will give you an opportunity to match up sentences using the word safety with the appropriate context.

(Show Transparency #1 and read out loud if necessary. Invite questions, and discuss.)

(Before showing Transparency #2 invite audience to jot down their answers to compare with our answers. Show Transparency #2. Read directions. Invite questions and respond. Read each question, let audience jot down their answer. AFTER EACH QUESTION, ask for consensus and write majority responses in space. When finished, show "right" answers and explain. Continue with text.)

I hope your answers agreed with mine, but whether they did or not is unimportant. What is important is that we realize that safety is a multi-dimensional concept and has different meanings to different people. As we've shown, the meaning intended can usually be inferred from the sentence. But too frequently safety is used in ways which confuse. For example, what is meant by "Safety is everybody's business"? Or, "Safety on the streets is a major problem today"? More to the point of our concern, what is - or what should be - the content of "safety education"

programs being developed today? Do they deal with all meanings of safety we've categorized above? Should they? Is there room in the curriculum to deal with the health, security, and accident dimensions of safety from kindergarden through grade 12?

If you agree with me that - considering the practical limitations of time and money - we must define our boundaries in developing "safety education" curricula, I hope you'll further agree that we ought to limit our area of responsibility to the accident prevention and accident mitigation arena. (Mitigate - a two-bit word meaning "to make less severe.") This would have several benefits: First, it would tend to improve communication - we'd know that safety education meant "accident prevention and accident mitigation education," and not "health" or "security." Secondly, it would improve our instructional ability and techniques. Teaching girls how to defend themselves against attack requires a different approach, different skills, different preparation and establishes different behavioral outcomes than teaching girls how to prevent/mitigate accidents in the home. Instead of becoming "experts" in health, crime-prevention, AND accident prevention/reduction, we'd be able to concentrate our efforts on the accident problem alone.

Finally, it would show where our priorities are. It would show that we feel that accidents are a major social problem, worthy of our complete and undivided attention. To mix up connotations of health and crime with accidents suggests no priority. My prejudice is clear, and I suspect yours is, too, or else you wouldn't be here: we, as safety educators, think that accidents are a MAJOR social problem and we're concentrating <u>all</u> our efforts in an attempt to solve that problem. Which is not to say - and let me emphasize this - that health and crime are not important social problems in this country. But health educators have their prejudices, and criminologists have theirs'. As safety educators we ought to beat the drums for our prejudice - safety ... meaning, as by now you understand, accident prevention and mitigation.

I hope I've somewhat clarified the concept of safety. I hope you agree with me that <u>only</u> the accident prevention and accident mitigation dimensions of safety ought to be our area of concern. But clarifying the concept is only part of the problem. If safety education should restrict itself to accident reduction, then we need to have a clear understanding of what accidents are in order (1) to prevent them from happening and (2) to make less severe the consequences of those we are unable - or fail - to prevent.

The next transparency will show four accident scenes. As you examine them consider these questions:

1. Which of the four scenes best illustrates an accident? (Use whatever criteria you choose.)

2. Are all four scenes equal in illustrating an accident?

3. Are none of the scenes adequate illustrations of accident?

(Show Transparency #3 and read the following:)

In each of these scenes a brick is shown falling from an unknown source. In scene "A" it falls harmlessly to the ground. In "B" it smashes a pane of glass causing approximately $20.00 damage. In "C" it strikes a worker on the head causing serious injury. In "D" the brick strikes a worker who is wearing a hard hat and there is no injury.

(Give the audience an opportunity to react to transparency, ask questions and discuss. Then ask how many vote for each scene.)

If you voted for "B" or "C", you're with the majority of persons who have responded to these scenes. Accidents are almost universally equated with injury or damage. But let's examine the logical inconsistency in that reasoning. If accidents are defined in terms of their consequences, then accidents become absolutely unpreventable because the accident hasn't happened until injury/damage is produced! Put another way, you can't prevent something that hasn't happened. Accident prevention thus becomes mere semantic nonsense.

Now, if you felt that all four scenes were equally valid you're getting closer to what I consider the "right" answer. The "right" answer is that none of the scenes illustrate an accident - they all show the RESULTS of an accident. The "accident" happened at the point in time where the brick "went out of control" and fell from wherever it happened to be.

The key word here is "control." As long as the situation is under control an accident can't occur. When we lose control - even for an instant - an accident has happened IF that event has realistic potential for injury or damage. Whether or not injury or damage does, in fact, occur is often completely a matter of chance. Consequently, wearing protective gear (hard-hats, steel-toe shoes, etc.) has nothing to do with accident prevention, but everything to do with accident mitigation.

For example, when an airplane crashes, investigators search back in time from the crash site to find out where the situation went "out of control." That's where the accident happened; the plane crash was merely the consequence of losing control.

Another example closer to home: A car skids on a wet road. If the driver regains control, he hasn't prevented an accident; he's prevented possible untoward consequences of an accident. Whether the car skids into a tree, or slides harmlessly to a halt on the grassy roadside, an accident has occurred. The results of an accident - as we've indicated before - are often merely fortuitous.

A final example: A tornado. We can't control natural events but we can mitigate the consequences of these events by taking shelter, building stronger buildings, fleeing the storm, etc.

Based on the foregoing we submit this definition of an accident for your consideration:

(Show Transparency #4.)

AN ACCIDENT IS A SUDDEN, UNPLANNED EVENT WHICH HAS THE REALISTIC POTENTIAL FOR PRODUCING INJURY OR DAMAGE.

To explain: Accidents are sudden. While we can often predict certain accidents, it's extremely difficult to predict when they will occur. In common parlance, accidents are "unexpected."

Accidents are unplanned. If intent - planning - can be shown to precede the damaging or injurious event, the occurrance becomes a criminal act, not an accident.

Accidents ... have the realistic potential for producing injury or damage.

A dead limb falling in a forest has little potential for producing injury or damage. The same event in a busy public park or city street is an accident, since it has a realistic potential for injury or damage.

Now let's see if we can put this all together to answer the question posed by our topic - "Safety Education - What Is It"? If we limit ourselves to the accident prevention and mitigation meaning of safety, as I believe we should, and add a conventional definition of education, we have the following: (Show Transparency #5) "Safety Education is the process of developing, through a formal course of study, the knowledge, skill and behavior necessary to prevent accidents* and minimize their consequences." (*Accidents: sudden, unplanned events which have the realistic potential for injury or damage.)

This, then, is my answer - and my rationale for that answer - to the question of what is safety education. I respectfully submit it for your consideration. Once we've arrived at a consensus on this or a better definition, we can deal with the second problem, Where Do We Go From Here?

Thank you for your kind attention.

SAFETY - WHAT IS IT?

There are at least five distinct meanings of the word safety (or its derivitive) which can be ascertained from its use in a sentence.

I. HEALTH CONTEXT

"The public drinking supply in some countries may not be safe for Americans."

II. SECURITY (OR CRIME) CONTEXT

"Our expanded campus police force has made this the safest campus in the state."

III. TECHNICAL CONTEXT

"The safety we scored in the last quarter saved the game for us.

IV. ACCIDENT PREVENTION CONTEXT

"It's important to have your car safety checked before your vacation trip."

V. ACCIDENT MITIGATION CONTEXT

"Safety glasses must be worn in all school shops and labs."

SAFETY - WHAT IS IT?

Directions: Before each sentence write the numeral of the category appropriate to the meaning of the word""safety" as it's used in the sentence.

CATEGORY

I	II	III	IV	V
HEALTH	SECURITY (CRIME)	TECHNICAL	ACCIDENT PREVENTION	ACCIDENT MITIGATION

____ 1. THE RIGHT WAY IS THE SAFE WAY.

____ 2. BE SURE THE SAFETY IS ON UNTIL YOU'RE READY TO FIRE.

____ 3. PADDED DASHES AND VISORS HAVE PROVEN TO BE EFFECTIVE SAFETY FEATURES.

____ 4. PARK YOUR BIKE IN THE BASEMENT - IT'LL BE SAFE THERE.

____ 5. SAFETY SHOES ARE REQUIRED IN THIS SHOP.

____ 6. I FEEL SAFER WEARING MY SEAT BELT.

____ 7. IT'S SAFER FOR ELDERLY PEOPLE TO STAY INDOORS WHEN AIR POLLUTION IS HIGH.

____ 8. THE SAFETY OF YOUR DEPOSITS IS INSURED BY AN AGENCY OF THE FEDERAL GOVERNMENT.

____ 9. ALL SAFETY EDUCATORS SHOULD TAKE A FIRST-AID COURSE.

____ 10. DON'T BE HALF-SAFE, USE _____ DEODORANT.

____ 11. LADIES, FOR YOUR PERSONAL SAFETY, LEARN SELF-DEFENSE AT JACK RYPER'S STUDIO.

____ 12. IS IT SAFE TO STORE LEFT-OVER CANNED FOODS IN THEIR ORIGINAL CONTAINERS?

____ 13. SAFETY IS A MANAGEMENT FUNCTION AND RESPONSIBILITY.

____ 14. WYNGNA PRAYER AIRLINES HAS AN EXCELLENT SAFETY RECORD.

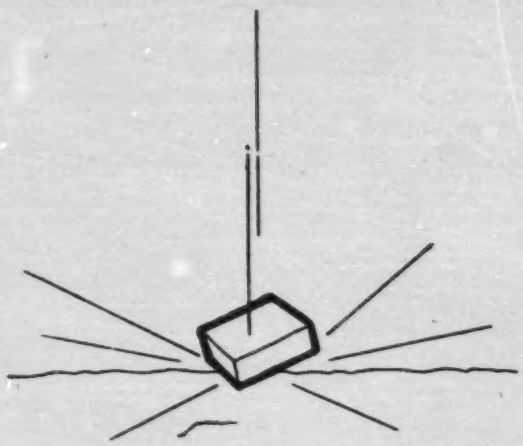
____ 15. CHILD MOLESTATION SHOULD BE AN IMPORTANT PART OF YOUR ELEMENTARY SAFETY PROGRAM.

____ 16. WORN TIRES ARE ESPECIALLY UNSAFE DURING HOT SUMMER DRIVING.

SCENE A

INJURY: NONE

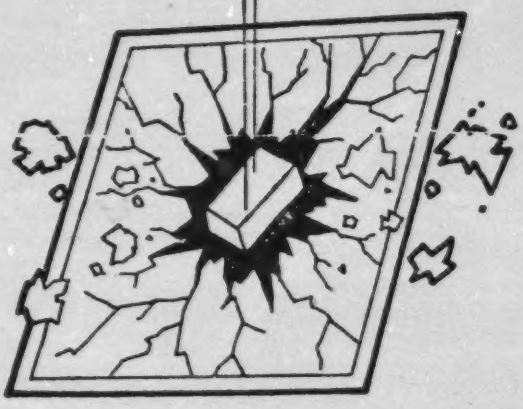
DAMAGE: NONE



SCENE B

INJURY: NONE

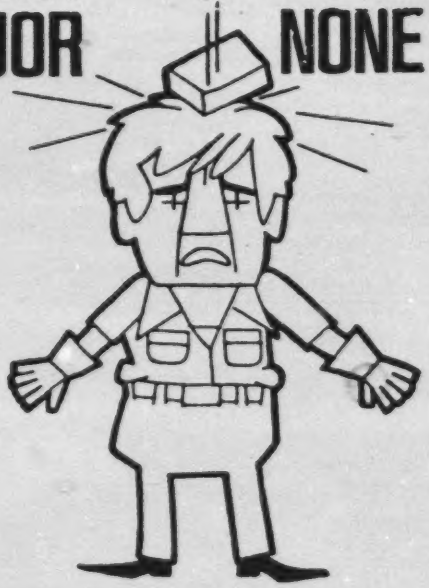
DAMAGE: $20.00



SCENE C

INJURY: MAJOR

DAMAGE: NONE



SCENE D

INJURY: NONE

DAMAGE: MINOR

ACCIDENT - A SUDDEN[1], UNPLANNED[2] EVENT WHICH HAS THE REALISTIC POTENTIAL FOR PRODUCING INJURY OR DAMAGE[3].

(1) **SUDDEN** - Accidents can often be foreseen, but predicting when they will occur is impossible. Thus they are unexpected, sudden events.

(2) **UNPLANNED** - If planning (intent) can be shown, the event becomes a crime, not an accident.

(3) ... has the realistic potential for producing injury or damage. A dead limb falling in a forest has little potential for injury or damage, The same event in a public park is an accident, since it has obvious potential for harming people or property.

SAFETY EDUCATION - WHAT IS IT?

"Safety education is the process of developing, through a formal course of study, the knowledge, skill and behavior necessary to prevent accidents* and minimize their consequences."

(*accidents: sudden, unplanned events which have a realistic potential for injury or damage.)

SAFETY EDUCATION: WHAT IS IT?
WHERE DO WE GO FROM HERE?

Dale O. Ritzel, Ph.D.
Department of Health Education
Southern Illinois University
Carbondale, IL

I am honored to be here today and to give you some of my thoughts about what I feel safety education is and where we can go from here. I would like to comment about what I feel the existing practices are and where we have gone wrong. It is agreed that different people have different ideas and meanings about what safety education is. Up to this point we have considered safety education to be traffic safety oriented particularly in the area of driver education. Also I think we have tended to think that safety education has been and should include grades K-12 in the area of traffic safety education. I feel presently this is what is being done.

My definition of safety education is thus - all programming dealing with activities for safety from birth to death. From this you can see that I feel that safety education is a continuous process and should not be limited to grades K-12. With that let me get into some of the categories of progression now. Safety education should be programmed for all ages starting with the pre-school and continuing through to senior citizens. Let me mention why safety education should be geared this way. In the area of pre-school, parents have always had the most influence on instilling safety awareness in children. However, now we are finding more and more that both parents are working full time and that the number of children attending day-care centers and nursery schools is increasing. For these children in day-care centers and nursery schools there should be included a very basic type of safety program at the child's level to begin teaching concepts and developing habits of safety consciousness. We need to be emphasizing the safety education program to these levels. One thing I would say about this age level, and I am sure most of you are aware of this, is that this is the age in which the child is developing his basic concepts and basic attitudes toward things in general including safety and, therefore, safety is one thing that should be emphasized.

In the area of K-12, I think we have spent the bulk of time and energy in recent years emphasizing safety topics in this area. In the past several years some very excellent materials in curriculum were developed in different states including Illinois, Indiana, Maryland, Oklahoma, Montana, etc. There are quite a few states that have done a tremendous job on developing programs in the area of K-12, particularly in the area of driver education and more recently K-8. However, there is still a lack of materials in grades 9, 11 and 12. The material developed so far has been for the most part traffic safety oriented. Further, it is felt that we have hurt ourselves by trying to develop tremendous amounts of curriculum materials and not trying to emphasize that safety education can best be incorporated in the curriculum as a part of or an addition to other subjects. One cannot and we should not attempt to

believe that we can get safety education into the schools through any other way. One additional point should be made now. I think we have attempted in each state and in each local setting to kind of re-invent safety education, instead of trying to utilize the tremerdous well-developed materials that have been written in the past few years.

In the area of safety education for young adults there is an overlap between the students that were discussed in the upper grades and young adults. One area of safety programming is de-emphasized here. These are the students who are going out and getting jobs and moving away from home for the first time. They are beginning to develop their own residence, their own place where they live. They are beginning to assume the responsibilities of the head of a household. We have neglected to develop programming that will prepare them for the new facets of safety problems that they will face. We need to have more programs dealing with their safety needs: for example, food handling, how to prepare food, how to do home canning; fire safety in the home; safety in electrical wiring, heating systems, plumbing and sanitary systems. We are not preparing these young people for these types of activities, and this is one important area in safety education we need to emphasize with the young adults.

A few comments should be made with respect to safety programming for parents and other adults. Most people who have children were faced with something completely new and different that they probably were not educated for. As the child was growing and developing, new safety problems were constantly arising for the parents. We have not actively prepared parents for this type of safety awareness for babies and small children. As a child begins to crawl and walk and investigate, new realms of safety problems do arise. They put strange objects and supplies in their mouth or get into sharp or pointed objects, or they may trip and fall. Parents should be taught criterion for safe judgment in purchasing such items as car seats, strollers, high chairs, cribs, play pens, etc. Parents need to learn as much as possible about product safety. This is one area that has been neglected in safety programming. Also, parents need to learn what toys are safe and the criterion for judging a safe toy. The number of children who are injured and the number of children who ingest poisonous substances is much too high and indicates that there is much to do in safety education for parents. Parents do not have the proper background to know what are the safest judgments.

Another group that needs to be considered is the senior citizens and of all the groups that have been discussed up to this point, this is the most neglected one from the viewpoint of safety activities. At present many towns have organized senior citizen groups in which they participate in a variety of activities. Those in charge of senior citizen programs should be aware of the possibility of activities involving safety education. Many groups have daily programs where hot lunches are served and they have some type of program following the lunch. They have guest speakers such as health personnel, nurses, doctors and dieticians to give the senior citizens safety tips and information and to answer any questions they may have. The National Safety Council's Defensive Driving Course and some other programs have been taught to senior citizens. The community that provides the above-mentioned activities is the most advanced in regards to educating senior citizens. All communities should strive to provide

these services to senior citizens. Many senior citizens live alone and it is important for them to be constantly aware of safety needs. Many cannot hear, see, smell or taste as well as they used to and their mobility may not be as good as it once was. All these factors bring up new safety problems that the senior citizen should be aware of and educated to compensate for.

From the standpoint of where we go from here, we have not utilized the lay people that have the background and have worked in the areas that involve safety, for example; policemen, firemen, electricians, nurses, doctors and others in health related fields. One needs to make more use of existing materials and resources. It was mentioned earlier that some of the states have developed curriculums, but I think we tend to neglect organizations such as the National Fire Protection Association, or the excellent material that was developed by the School Health Study Group program a few years ago or a more recent group, the U. S. Consumer Product Safety Commission. One must also include the National Safety Council in this grouping of materials developers. The Coast Guard and boating associations, recreational groups and clubs (for example, snowmobiling) have also developed excellent materials. These groups have excellent resources and again, we should not try to re-invent safety education but make use of what is available. Product and consumer safety is in the forefront now and if programs are geared to the consumer, there will be a large clientele interest in the community.

To further safety education in the schools, each school system should have someone employed such as a safety coordinator who would work with the teachers to be certain that the children are being exposed to the safety concepts that they can assimilate at each age or grade level. One reason that is important is that many teachers have had no training in safety education for children on a formal level. Safety education for elementary teachers has not been required and is not required at universities and colleges. All prospective K-12 teachers and other persons working with adults in the community should have modules presented to them concerning safety concepts and programming during their undergraduate and graduate degree programs. Each university and college should move in the direction of requiring future teachers to take safety education courses where they would learn how to relate safety awareness to children through all the subjects. If the teachers have a high level of safety awareness they will be better equipped to transmit this to children. In this course all the possibilities of safety instruction should be presented to the future teachers.

In summary, there are several things that the College and University Safety Educators Association should consider. First, all groups, and by that is meant all age groups, should be included in safety education programming. It felt that educators have not utilized many good things that are available to us. For example, at many colleges and universities there are continuing education programs that are set up for people in the community. Why not offer a variety of safety programs for all ages through the continuing education format? Today most things are concerned about products and the consumer and we can also indicate the environment as a part of this concern. Since the U. S. Consumer Product Safety

Commission has been organized and since they are developing safety education programs at some of these different age levels, one must consider a program related to products and the consumer. And then finally, do not try to re-invent safety education. The basic material and the basic resources are there, utilize them.

ROLE OF THE SAFETY GENERALIST - AN EDUCATIONAL SOLUTION

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In the last few years people doing various aspects of safety work have become increasingly aware that the intensifying press of obligations connected with safety, call for education. They find that years of safety experience does not enable them to meet the new and growing demands of the safety profession.

It has become apparent that short courses of training in OSHA, in driver education, in systems safety, in industrial hygiene, does not make a safety professional. At best, this type of training enables them to function as a highly specialized man. Certainly it does not enable a person to function as a safety administrator, a safety manager or as a complete safety professional. When combined with years of experience this training usually has meant only that we had a very experienced safety specialist. Seldom did it mean a man on the top management team knowing the language of management, of finance, of personnel. This specialist usually speaks the safety language fluently, but not the language of business or industry. Thus he is not ready to function as a manager, but is restricted to his specialized safety field.

Why do some safety people never quite make the insider's group in the government or business community? Look at some complaints we hear on safety people from management:

1. Are not cost conscious
2. Not production oriented
3. Cannot measure their true worth
4. Give more problems than answers
5. Often unprepared and lacking objectivity
6. Unrealistic in demands and recommendations
7. Don't understand the real problems
8. Cannot connect safety beyond the supervisor

If that is what management thinks, it is understandable why safety people cannot make the first team.

Complicate this with the great changes in the way business and industry operates today and the changes in safety itself...the situation gets worse. Throw in OSHA, consumer safety, products safety, governmental regulations, environmental considerations, liability suits, sociological changes in

dealing with people, demands for worker involvement and a need to quantify safety efforts. No wonder the safety man of today is ill-prepared to cope with the job of being a safety professional and a safety manager. This calls for an order of educational preparation that we have never provided before.

This leads directly into the debate of safety specialist or safety generalist. If safety is a function of management, then people must be prepared for the safety profession who can operate as managers. In order to develop people who can meet the many faceted demands of safety today, a broad knowledge is needed, a far reaching knowledge that touches on all aspects of business and industry. No way can the man who is trained or educated as a highly developed expert, in some specialized area of safety, also be expected to be conversant with all the rest of safety. Yet, the demand is there for a man who understands something about all aspects of safety and management and also his particular kind of business. The road to safety success is littered with safety experts who could go no further than their safety expertise. In short, after reviewing the work of hundreds of safety people, after seeing the results of thousands of interviews and questionnaires, we have become convinced at the University of Southern California that the dominant need now and foreseeable future is for a safety generalist -- a man who can approach all of today's and tomorrow's safety problems and do it in the language of those for whom he works.

Perhaps a better term than safety generalist is safety universalist. This term reinforces the need for a broad background of knowledge that is basic or fundamental to safety practice. In the same way that there are universal foundations of medicine for all doctors, universal fundamentals of management principles for all managers, and universal basics of weather, navigation and flight for pilots; so is there a need for a certain basic knowledge for safety practitioners who will function as advisors to management. If the term safety universalist fits better than the often debated safety generalist, by all means call him a safety universalist. So it was in designing our new bachelor of science in safety program that we opted to supply that missing man of all seasons, the safety generalist. The aim was to:

1. Fill a national need for safety professionals who can meet changing societal needs.

2. Allow safety students from varying backgrounds to qualify for a career as safety professionals.

3. Provide an opportunity for those in other fields and disciplines to obtain a minor or special work in the safety field.

4. Offer internships, job experience for those in school so they will take experience to their first safety job.

5. Assist the safety specialist to upgrade to certification and registration.

6. Develop an educational structure that would foster safety research and safety publications.

How did we go about this at the University of Southern California? We didn't do it ourselves. The safety profession had done much research on the subject and had quite often come to similar conclusions regarding the needs of the profession. The need was for a man educated to the changing interdisciplinary requirements of higher level management.

Putting a program into effect that encompasses nearly all disciplines is not an easy thing at a university. There were some sharp operators in our own safety center and we had a lot of help at the university. We had an extremely fine sponsor in our school of public administration who was willing to bend over backwards to help develop a new breed of safety professionals. We have ended up with the resources of the entire university at our disposal and much of southern California besides. Our philosophy was something like this:

1. A two year degree prepares a man to function as a technician, a safety specialist.

2. The four year degree prepares him to function (with the addition of some experience) as a safety professional.

3. The graduate level of study prepared him to function at the administrative or research level of safety.

4. There is a basic core of knowledge universal to all safety positions.

What is a BS in safety like as others have researched it and we have incorporated it? First there are the basic educational requirements that furnish a broad educational background of value to the safety man. Subjects have been carefully selected to support knowledge essential for later safety subjects. (Slides)

#1 - Communication

Seminar in Writing and Literature
Spoken Communication
Media of Mass Communications
Principles of Public Relations
Interpretive Writing

#2 - Mathematics

Introductory College Mathematics
Mathematics for Social Sciences
Fundamentals of Calculus
Psychology of Statistics
Fundamentals of Computer Science

#3 - Natural Sciences

General Biology
General Physics
Fundamentals of Physics I
Mechanics, Heat, and Sound
Fundamentals of Physics II
Optics, Electricity, Magnetism
General Chemistry

#4 - Social Sciences

Psychology and Human Behavior
Introduction to Psychology
Economics of Ecological and Urban Problems
Principles of Macro Economics
Labor Economics
Sociology

#5 - Humanities

Logic
Ethics
Visual Communications
Photography in Scientific Research

For the student who is now a college junior, for the safety man who never finished his college or for the safety man who simply wants to upgrade himself there comes required safety courses.

#6 - Required Safety Courses

INTRODUCTION TO SAFETY AND HEALTH

Safety and health principles, concepts, and methodology; accident prevention techniques; professional terminology; career opportunities.

HUMAN FACTORS IN ACCIDENT PREVENTION

The role of human factors in accident causation; methods of circumventing human limitations; human capabilities in accident prevention.

FUNDAMENTALS OF SAFETY TECHNOLOGY

Physical hazards of work environments; principles and methods for identification, evaluation, and control.

#7 - Required Safety Courses (Continued)

SAFETY EDUCATION AND TRAINING

Requirements for safety education and training including safety related techniques and education effectiveness evaluations.

ELEMENTS OF INDUSTRIAL HYGIENE

Introduction to industrial hygiene; legislative and regulatory requirements; major problems and practices for development of healthy work-center environments.

SAFETY PROGRAM ADMINISTRATION

Application of management theories and practices to administrative requirements of safety programs as related to industrial safety and health.

#8 - Required Safety Courses (Continued)

ADVANCED SAFETY TECHNOLOGY

Physical hazards of the work environment; methods for control, including facility planning.

APPLICATIONS OF INDUSTRIAL HYGIENE

Principles and elements of industrial hygiene; use of instruments, measurement devices and control method essential to health and safety in work areas.

And then electives that allow the student to develop as he wishes in safety.

#9 - Elective Safety Courses

ANALYSIS AND MEASUREMENT IN ACCIDENT PREVENTION

Qualitative and quantitative techniques for analysis, measurement, and evaluation of safety performance. Safety research requirements, problems and approaches.

REGULATORY ASPECTS OF SAFETY

Survey of regulatory basis of accident prevention requirements; federal laws, codes, standards, court judgments and procedures; case studies; worker, consumer and environmental influences.

HUMAN FACTORS

Survey of human factors related to work area, design and use of equipment, protective equipment and life-support requirements for hazardous environments. Mockups and simulator demonstrations.

#10 - Elective Safety Courses (Continued)

INDUSTRIAL PSYCHOLOGY

Psychological principles and practices in human factors as applied to industry.

SYSTEM SAFETY

.rinciples of systems analysis to determine potential hazards or failures of a system: risk evaluation, safety technology, hazard detection, safe product assurance methodology.

FIRE PREVENTION AND PROTECTION

Fundamentals of flame generation and propogation; theory of fire fighting methods; methods and devices for fire detection and protection.

#11 - Elective Safety Courses (Continued)

SAFETY COMMUNICATIONS

Communication techniques in accident prevention programs; interrelationship of communications with safety disciplines; effectiveness of communication techniques in safety programs; safety administration communication skills.

PROBLEMS IN ENVIRONMENTAL HEALTH

Survey of current challenges to attaining environmental health in modern organizations.

There is a certain amount of specialization that can be done within our safety center.

#12 - Speciality Safety Courses

AEROSPACE SAFETY

Accident prevention aspects of aerospace safety; general aviation, air transport, and space operations; regulations and controls; operational environment; public opinion.

TRANSPORTATION SAFETY

Seminars on major modes of transportation, excluding airborne; study of safety aspects on a survey basis.

COMMUNITY SAFETY

Survey of community safety organizations; programs, problems and resources.

SCHOOL SAFETY

Fundamentals of complete school safety programs; correlation of administrative techniques, instructional methods, and protective processes essential to safeguard pupils, employees, and public.

We will arrange for experience in any field of safety a man wants experience in.

#13 - Safety Internship

On-the-job safety experience under the direction of a safety professional and faculty advisor. Student will pursue a program of internship tailored to the students chosen safety field requirement by working in a safety capacity in a safety department of a cooperating business, industry or governmental agency.

#14 - Field Study

On-site observations of safety programs and safety professionals in operational environments.

And finally, the student can develop any way he sees fit with additional electives.

#15 - Free Electives

Twenty semester credit hours are available to select any university credit course with the approval of his faculty advisor. They may include further study in any area of safety above the required and elective safety courses.

This degree does not mean that we disagree with the concept of and need for the safety specialist. To the contrary, at my university, we consider ourselves expert in the areas of aviation safety and in systems safety and we intend to continue our expertise in those areas. In developing our Bachelor of Science in Safety we are only saying that a gap exists in the higher educational system and that there is a need to prepare people to be safety generalists.

If we do indeed seem to be offering "all things to all men" I admit that we intend to fully prepare a man to be a well rounded safety generalist along with a little safety experience. We intend to offer him every opportunity in the educational field to prepare for the safety career of his choice and we can use all of Southern California to do it in.

No longer do we despair of advising students who want to make a career in safety, not just some special part of it. For people who aspire to fill a need, to advance in the top management structure, to meet the demands of today's business and industry and who can meet all of the challenges of safety; we believe we have a good education for them. It is our intent to fully prepare people to move in the top echelons of the professions.

There is another aspect of the safety generalist or safety universalist need that has not been discussed here. This is the requirement brought on by the age of systems in which we now live. The shortcomings of classical safety and safety experience as methods to meet the rapidly growing and complex operations of today are recognized. There is an ever-increasing need for safety managers who can synthesize complexity of organizations and societal demands. It calls for someone who can relate safety to all problems of an organization and in turn must be able to address all problems of an organization. This is the systems approach that we have barely addressed through some technological techniques. It calls for understanding the interrelationships of the parts and the sub-system of an organization. The technological and information explosions of recent years have left safety further behind than most professions. The estimated doubling of man's knowledge every five to ten years only emphasizes our problem in safety. Even this doubling of knowledge is said to be accelerating. We don't profess to have the safety profession's solution to keeping abreast of this increase in complexity of operation. It does seem that the safety generalist or safety universalist is a step in the right direction.

A SAFETY PROGRAM IN THE URBAN SCHOOL SETTING, 1975

Larry Bates
Director of Safety Education
Kansas City School District
Kansas City, Missouri

Thank you for the opportunity to participate in this program. The Kansas City, Missouri School District, which I represent, is a district of declining enrollment (54,000 last year compared to 77,000 ten years ago). There are 77 elementary schools and 20 secondary schools.

Since this is a conference for safety educators, you would no doubt like to hear that a school safety program has the highest priority in the school setting today. But, as you know, this isn't true in that financial, social, political, and job survival are the ranking concerns. In addition to these priorities, the public as well as the staff would rank health and safety (or welfare), extremely high. What they really mean is they are up tight about health and security. This priority probably ranks above even reading or academic achievement.

I have used the word "security" to differentiate between the security and safety education programs in the Kansas City School District. While they are separate departments in our district, they do cooperate in some activities. As an example, the Health and Safety Education Department was responsible for organizing and directing a representative committee to write an Emergency Procedures Guide.

I need to give you some background to clarify the current status of our program. Up until eight years ago our district had a full time Supervisor of Safety and Driver Ed, probably one of the few in the nation at that time.

In 1968, with the beginning of a severely curtailed financial structure and the beginning of an administrative and staff reorganization this position was eliminated along with daytime Drivers' Education - a decision that was strenuously fought by staff and various segments of the community but to no avail.

At that time I was assigned the Safety Ed, the night and summer Drivers' Education Program, along with the Health and Physical Education assignment that I already directed.

Soon a new superintendent arrived on the scene who changed the Central Office staff role philosophically from supervisory to supportive - a very different ball game in terms of programming and the relationship with principals and staff.

Currently, approximately 50 per cent of my time is devoted to the Safety and Drivers' Education program. While still involved in many of the same responsibilities of the former Safety Department, many changes have been made.

Two basic publications that have been revised and produced by this department and which contain major policies and procedures for the district are the Safety Education Manual and the Emergency Procedures Guide.

Safety Education programs and activities in the district include the following areas of safety: traffic, pedestrian, fire, tornado, playground; Safety Education bulletins and publications; assemblies, school safety patrol, curriculum, staff information, bicycle safety, building safety, interdepartmental and interagency relationships.

Traffic Safety - A safety committee comprised of a member of the Safety Education unit of the police department, a representative of the City Traffic Engineers' Department, and I conduct school crossing surveys all year at various sites upon the principal's or a committee member's request. Shifting of population has necessitated more surveys. School crossing guards are under the jurisdiction of the police department.

Pedestrian Safety - In addition to school crossing guards we have a Safety Patrol program, films, programs and assemblies by students and the police department; a baseball game, circus and individual school recognition is provided for the patrol members. Each school has a safety coordinator who works with the principal in this program. We also participate in the Green Pennant Program.

Fire Safety - Two fire drills a month are required of each elementary and secondary school. We have fire safety inspections each fall by the fire department. Their report is followed up by the District Coordinator who is also responsible for approving smoking areas for staff at each school.

Weather Safety - Two tornado drills a year are held in designated areas of each school building. Each school is equipped with a Nees Radio receiver for emergency warnings. New films are available for use. We work closely with the U.S. Weather Bureau.

Student Education - In cooperation with the police department, grades K-3 use the Officer Friendly curriculum. The ASAP Program is used in cooperation with the city for juniors and seniors. A first aid unit is a required health course in the junior highs. Summer Safety Camp for safety patrol members is held each year in cooperation with the Rotary Club, police department and the safety council. Many films on various facets of safety are available on all grade levels.

Staff Information - Monthly bulletins are sent to each school containing tips for safety education. Special notes are included in the Weekly Staff Journal.

Bicycle Safety - We cooperate with the PTA and the police department as we furnish materials.

Building Safety - We hold yearly inspections of each school, work with School Facilities on playgrounds, apparatus, needed repairs and parking.

Interdepartmental and Interagency Relationships - We work with School Facilities, Industrial Arts, Vocational Ed, Physical Ed, Health Services, Security Bus Program, Health Department, Police Department, Fire Department, City Traffic Engineer, Safety Council, Weather Bureau, AAA, and various health agencies.

Drivers' Education Program - We participated in a 14 month Drivers' Education Research Project. We offer a self-supporting night time Drivers' Education Program three times a year.

Reports - We handle all accident, fire drill, and tornado drill reports. We have a monthly computerized accident report which goes to all schools and appropriate staff members. We distribute an annual accident report each year. Principals are reminded at the end of each year of the department's importance as they do not receive their final pay check until all reports are turned into our office.

Accident Survey - We have recently completed a six year survey of accidents using accident reports for compilation. Accidents have decreased in all areas. The sixth grade is the level of the greatest number of accidents, and the 12th grade has the fewest. The greatest number of accidents occur on our playgrounds. Most pedestrian accidents have been caused by student negligence in grades K-3.

WHERE DO WE GO FROM HERE?

Hopefully, through the strife and battle for survival Safety Education will remain a part of the district's organization. We must realize that the community, student, and staff attitudes and priorities have changed and that old programs and approaches will no longer be acceptable or effective. We need to recognize that financial, social, population shifts, old communities and buildings play a definite role in what is done and can be done.

I repeat, survival is the primary goal with all its ramifications -- not necessarily safety -- which can play a role.

Relationships with principals and teachers have changed on the building level, as well as the Central Office and building level. This means programs must be realistic, not idealistic, considering personnel, facilities, and environmental limitations. I have found over the years too many of the innovative programs are not realistic or practical for the urban setting largely because of space and facilities. For example, in the CMSU-HUMRO Drivers' Education Project we found out some restrictions and limitations in programming because of uncontrollable factors that are common in any urban setting, as an example, range space centrally located for use of all senior high schools. I would reiterate, we must be realistic about goals, programs and expectations.

Many of us at this conference think and plan ideal programs based on suburban or small town-like thinking because that is where most of us in this field live. This has been one of my pet peeves over the years as I've attended conferences, conventions, etc., in various areas of education. Too many innovative programs that are not workable or practical in the urban environment. They are paper or book-like programs.

Therefore, to set the stage for the panel, I challenge colleges and universities to develop programs that are applicable for the urban districts

as well as the rural or suburban setting. Sixty-five per cent of the public school students in Missouri live in the cities and programs often are designed for and focused on the other 35 percent, including a disproportionate amount of financial assistance and support.

We welcome you to involve yourself in planning and programming where the action is and where the facts of life are experienced.

OTHER SAFETY MONOGRAPHS FOR SCHOOLS AND COLLEGES

(Monographs No. 1,2,3,5,6,13 and 16 are out of print and are available by loan only from the NSC Library.)

NO. 1 1952 — EXPERIENCING SAFETY IN COLLEGE AND UNIVERSITY LIVING CENTERS. Personnel Section, American Association of Colleges for Teacher Education and the Higher Education Committee, National Safety Council.

NO. 2 1954 — FIRST NATIONAL CONFERENCE ON CAMPUS SAFETY. University of Illinois and National Safety Council.

NO. 3 1955 — SURVEY OF ACCIDENTS TO COLLEGE STUDENTS. American College Health Association and the National Safety Council

NO. 4 1955 — SECOND NATIONAL CONFERENCE ON CAMPUS SAFETY. University of Minnesota and the National Safety Council. $1.80. Stock No. 429.50-4.

NO. 5 1956 — ACCIDENTS TO COLLEGE STUDENTS. American College Health Association and the National Safety Council.

NO. 6 1956 — THIRD NATIONAL CONFERENCE ON CAMPUS SAFETY. Massachusetts Institute of Technology and the National Safety Council.

NO. 7 1957 — FOURTH NATIONAL CONFERENCE ON CAMPUS SAFETY. Purdue University and the National Safety Council. $1.80. Stock No. 429.50-7.

NO. 8 1958 — FIFTH NATIONAL CONFERENCE ON CAMPUS SAFETY. California Institute of Technology and the National Safety Council. $1.80. Stock No. 429.50-8.

NO. 9 1959 — SIXTH NATIONAL CONFERENCE ON CAMPUS SAFETY. Michigan State University and the National Safety Council. $1.80. Stock No. 429.50-9.

NO. 10 1960 — SEVENTH NATIONAL CONFERENCE ON CAMPUS SAFETY. Cornell University and the National Safety Council. $1.80. Stock No. 429.50-10.

NO. 11 1961 — THE BICYCLE AND THE MOTOR SCOOTER ON THE COLLEGE CAMPUS. Michigan State University, the University of Washington and the National Safety Council. $1.25. Stock No. 429.50-11.

NO. 12 1961 — EIGHTH NATIONAL CONFERENCE ON CAMPUS SAFETY. Southern Illinois University and the National Safety Council. $1.80. Stock No. 429.50-12.

NO. 13 1962 — ORGANIZATIONAL STATUS AND DUTIES OF CAMPUS SAFETY PERSONNEL. Los Angeles City School System and the National Safety Council.

NO. 14 1962 — INJURIES IN MEN'S PHYSICAL EDUCATION AND INTRAMURAL SPORTS. Michigan State University and the National Safety Council. $1.80. Stock No. 429.50-14.

NO. 15 1962 — SAFETY EDUCATION LAWS AND REGULATIONS. State University of New York and the National Safety Council. $1.25. Stock No. 429.50-15.

NO. 16 1962 — NINTH NATIONAL CONFERENCE ON CAMPUS SAFETY. University of California at Berkeley and the National Safety Council.

NO. 17 1963 — TEACHER PREPARATION AND CERTIFICATION IN DRIVER EDUCATION. Illinois State University, Iowa State University and the National Safety Council. $1.25. Stock No. 429.50-17.

NO. 18 1963 TENTH NATIONAL CONFERENCE ON CAMPUS SAFETY. Indiana University and the National Safety Council. $1.80. Stock No. 429.50-18.

NO. 19 1964 ELEVENTH NATIONAL CONFERENCE ON CAMPUS SAFETY. Rutgers University and the National Safety Council. $1.80. Stock No. 429.50-19.

NO. 20 1965 TWELFTH NATIONAL CONFERENCE ON CAMPUS SAFETY. Central Michigan University and the National Safety Council. $1.80. Stock No. 429.50-20.

NO. 21 1966 THIRTEENTH NATIONAL CONFERENCE ON CAMPUS SAFETY. University of Washington and the National Safety Council. $1.80. Stock No. 429.50-21.

NO. 22 1966 SEMINAR FOR SAFETY EDUCATION SUPERVISORS. Indiana University, Insurance Institute for Highway Safety and the National Safety Council. $1.25.

NO. 23 1967 FOURTEENTH NATIONAL CONFERENCE ON CAMPUS SAFETY. University of Nebraska and the National Safety Council. $1.80. Stock No. 429.50-23.

NO. 24 1967 COLLEGES AND UNIVERSITIES HIGHWAY TRAFFIC AND SAFETY CENTERS. College and University Safety Centers, Division of Higher Education Section, National Safety Council. $1.25. Stock No. 429.50-24.

NO. 25 1968 FIFTEENTH NATIONAL CONFERENCE ON CAMPUS SAFETY. University of Vermont and the National Safety Council. $1.80. Stock No. 429.50-25.

NO. 26 1969 SIXTEENTH NATIONAL CONFERENCE ON CAMPUS SAFETY. Texas A & M University and the National Safety Council. $1.80. Stock No. 429.50-26.

NO. 27 1970 SEVENTEENTH NATIONAL CONFERENCE ON CAMPUS SAFETY. University of California at Santa Barbara and the National Safety Council. $1.80. Stock No. 429.50-27.

NO. 28 1971 EIGHTEENTH NATIONAL CONFERENCE ON CAMPUS SAFETY. University of Illinois at Chicago Circle Campus and the National Safety Council. $3.50. Stock No. 429.50-28.

NO. 29 1971 NATIONAL SAFETY EDUCATION CURRICULUM GUIDELINES (K-6). Indiana University at Bloomington and the Elementary School Section of the National Safety Council. $3.50. Stock No. 429.50-29.

NO. 31 1972 SAFETY IN K-6 STUNTS AND TUMBLING. Author, Miss Victoria Benedict. $3.50. Stock No. 429.50-31.

NO. 32 1972 NINETEENTH NATIONAL CONFERENCE ON CAMPUS SAFETY. Brown University and the National Safety Council. $3.50. Stock No. 429.50-32.

NO. 33 1973 TWENTIETH NATIONAL CONFERENCE ON CAMPUS SAFETY. Colorado State University and the National Safety Council. $3.50. Stock No. 429.50-33.

NO. 34 1974 TWENTY-FIRST NATIONAL CONFERENCE ON CAMPUS SAFETY. University of California-Davis and the National Safety Council. $3.70. Stock No. 429.50-34.

NO. 35 1975 TWENTY-SECOND NATIONAL CONFERENCE ON CAMPUS SAFETY. University of Calgary at Alberta, Canada and the National Safety Council. $5.00 Stock No. 429.50-35.

NO. 36 1975 FIRST NATIONAL CONFERENCE FOR COLLEGE AND UNIVERSITY SAFETY EDUCATORS ASSOCIATION. Central Missouri State University and the National Safety Council. $5.00. Stock No. 429.50-36.

(Over)

Beginning with Monograph (1971) No. 28, the series was renamed to include Schools--Safety Monographs for School and Colleges.

Except for sale items (all Monographs-1966 and prior-$1.00 ea.) Prices subject to 20% discount to NSC Members. For quantity prices write Order Dept., National Safety Council. Specify complete title and Stock No. Payment must accompany orders for $5.00 or less.